

REMARKS

The claims of the present application have been restricted to the process of claims 8 and 10 by amending claim 1 to include the limitations of claims 8 and 10. Claims 5 to 7 have been amended for consistency with the limiting of claim 1. Claims 2-4 and 8-21 have been canceled. New claims 22-25 have been added.

Claims 1-12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wu et al. (U.S. Publication No. 2003/0229013) ("Wu") and Toshiyuki et al. (JP Patent Application No. 10-082882) ("Toshiyuki") (identified as JP 11-255807 A in the IDS filed with the application). This is the same rejection that was made in the first Action.

Initially, applicants note that they maintain their position as explained in the response filed November 7, 2007, that the Office has failed to properly support the rejection because, first, the Office has not shown where each of the steps recited in claims 1-12 of the present application (other than the incorporation of an Fmoc protected sugar-linked Asp residue) are disclosed in Wu, either alone or as modified by Toshiyuki, and, second, the Office has failed to consider the prior art as a whole. The statements of the Office on page 5 of the Final Action do not properly address the issues raised by applicants' arguments.

Notwithstanding the lack of proper rationale by the Office to support its conclusion of obviousness, applicants have limited the claims as noted above to expedite the prosecution of the present application. A divisional application directed to the canceled subject matter will be filed.

Applicants respectfully submit that Wu and Toshiyuki fail to support a case of prima facie obviousness of the claims of the application as amended.

Wu discloses solid phase chemical synthesis, but discloses nothing concerning oligosaccharides. Wu is silent about disialooligosaccharide and monosialooligosaccharide.

Toshiyuki, on the other hand, discloses nothing concerning solid phase chemical synthesis. The teachings of Toshiyuki are limited to liquid phase chemical synthesis. Also, Toshiyuki is silent concerning disialooligosaccharide and monosialooligosaccharide. Toshiyuki does not discuss sialic acid.

The present invention as recited in the amended claims is directed to a process for preparing a glycopeptide containing an asparagines-linked oligosaccharide having a sialic acid. Sialic acid has a free carboxyl group. It is difficult to prepare a desired peptide using an oligosaccharide having a sialic acid since the carboxyl group in sialic acid also reacts in the peptide

synthesis.

Another problem involved with the use of oligosaccharides having sialic acid in solid phase synthesis relates to the use of TFA (trifluoroacetic acid) for cutting off the peptide chain from the solid phase. Sialic acid present at the nonreducing terminals of oligosaccharides is readily hydrolyzed under an acid condition, so that there is the possibility that the TFA treatment will cut off sialic acid from the glycopeptide prepared. Accordingly, there is almost no case wherein oligosaccharides having sialic acid are used for solid-phase synthesis. (Refer to page 4, lines 17-25, of the specification of the present application).

In light of such problem, an object of the present invention is to provide a process for easily preparing a sialylglycopeptide which comprises an asparagine-linked oligosaccharide having sialic acid and wherein the sialic acid is not cut off from the glycopeptide by an acid treatment. (Refer to page 5, lines 20-24, of the specification of the present application).

The combination of Wu and Toshiyuki fails to enable a person of ordinary skill in the art to fairly predict that the process of the present invention using oligosaccharides having sialic acid for solid-phase synthesis will, contrary to the knowledge in the prior art concerning the problems with the use of such oligosaccharides

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for solid-phase synthesis, be successful. Therefore, the combination fails to support the 35 U.S.C. § 103(a) rejection of the claims.

Removal of the 35 U.S.C. 103(a) rejection of the claims is believed to be in order and is respectfully requested.

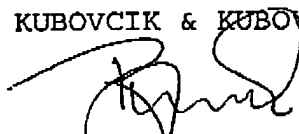
The foregoing is believed to be a complete and proper response to the Office Action dated December 28, 2007.

In the event that this paper is not considered to be timely filed, applicants hereby petition for an appropriate extension of time. The fee for any such extension may be charged to our Deposit Account No. 111833.

In the event any additional fees are required, please also charge our Deposit Account No. 111833.

Respectfully submitted,

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